

<110> Shi et al.

<120> 18 human secreted proteins

<130> PF512P1

<140> Unassigned

<141> 2001-01-25

<150> PCT/US00/22350

<151> 2000-08-15

<150> 60/148,759

<151> 1999-08-16

<160> 61

<170> PatentIn Ver. 2.0

<210> 1

<211> 733

<212> DNA

<213> Homo sapiens

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gactctagag	gat					733

<210> 2

<211> 5

<212> PRT

<213> Homo sapiens

<220>

<221> Site

<222> (3)

<223> Xaa equals any of the twenty naturally occurring L-amino acids

<400> 2

Trp Ser Xaa Trp Ser

1

5

<210> 3

<211> 86

0 9 7 6 3 3 2 6 - 0 4 2 6 0 2

<212> DNA  
 <213> Artificial Sequence  
 <220>  
 <221> Primer\_Bind  
 <223> Synthetic sequence with 4 tandem copies of the GAS binding site found  
 in the IRF1 promoter (Rothman et al., Immunity 1:457-468 (1994)), 18  
 nucleotides complementary to the SV40 early promoter, and a Xho I  
 restriction site.

<400> 3  
 ggcgcctcgag atttcccccga aatcttagatt tcccccgaat gatttcccccg aatgatttc 60  
 cccgaaatat ctgccatctc aattag 86

<210> 4  
 <211> 27  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <221> Primer\_Bind  
 <223> Synthetic sequence complementary to the SV40 promoter; includes a Hind  
 III restriction site.

<400> 4  
 gcgccaaagct ttttgcaaag ccttaggc 27

<210> 5  
 <211> 271  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <221> Protein\_Bind  
 <223> Synthetic promoter for use in biological assays; includes GAS binding  
 sites found in the IRF1 promoter (Rothman et al., Immunity 1:457-468  
 (1994)).

<400> 5  
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 gcccctaact ccgcccagtt ccgcccattc tccgccccat ggctgactaa ttttttttat 180  
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<210> 6  
 <211> 32  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <221> Primer\_Bind  
 <223> Synthetic primer complementary to human genomic EGR-1 promoter  
 sequence (Sakamoto et al., Oncogene 6:867-871 (1991)); includes a Xho I  
 restriction site.

<400> 6  
 gcgctcgagg gatgacagcg atagaacccc gg 32

<210> 7  
 <211> 31  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <221> Primer\_Bind  
 <223> Synthetic primer complementary to human genomic EGR-1 promoter sequence (Sakamoto et al., Oncogene 6:867-871 (1991)); includes a Hind III restriction site.

<400> 7  
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<210> 8  
 <211> 12  
 <212> DNA  
 <213> Homo sapiens

<400> 8  
 ggggactttc cc 12

<210> 9  
 <211> 73  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <221> Primer\_Bind  
 <223> Synthetic primer with 4 tandem copies of the NF-KB binding site (GGGGACTTTCCC), 18 nucleotides complementary to the 5' end of the SV40 early promoter sequence, and a XhoI restriction site.

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 ccatctcaat tag 73

<210> 10  
 <211> 256  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <221> Protein\_Bind  
 <223> Synthetic promoter for use in biological assays; includes NF-KB binding sites.

<400> 10  
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 caattagtca gcaaccatag tcccgccccct aactccgccc atcccgcccc taactccgccc 120  
 cagttccgccc cattctccgc cccatggctg actaattttt tttatattatg cagaggcccga 180  
 ggcgcctcg gcctctgagc tattccagaa gtatgtgagga ggcttttttgg gaggcctagg 240  
 ctttgcaaa aagtt 256

<210> 11  
 <211> 2247  
 <212> DNA

<213> Homo sapiens

<400> 11

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ccacgggcca	gatgactacg	acgaggaaga	tgaggatgag	gtgaaagagg	aggagaccaa	180
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<211> 2644

<212> DNA

<213> Homo sapiens

<400> 12

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 <212> DNA  
 <213> Homo sapiens

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c	ctc	cc	ctc	gg	cc	300
ttcagcccac	cagg	at	tc	cc	ct	360
ttgctgg	cg	ct	gg	cc	ca	420
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<210> 14  
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 <213> Homo sapiens

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<210> 15  
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 <212> DNA  
 <213> Homo sapiens

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&lt;210&gt; 16

&lt;211&gt; 1350

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (1135)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (1148)

&lt;223&gt; n equals a,t,g, or c

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&lt;223&gt; n equals a,t,g, or c

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&lt;221&gt; SITE

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&lt;223&gt; n equals a,t,g, or c

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&lt;221&gt; SITE

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&lt;223&gt; n equals a,t,g, or c

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 <213> Homo sapiens

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<212> DNA
<213> Homo sapiens
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<211> 1898
<212> DNA
<213> Homo sapiens
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<211> 1865
<212> DNA
<213> Homo sapiens
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aaaaaa	1865

<210> 24  
<211> 1297  
<212> DNA  
<213> Homo sapiens

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aagtacggga agcccaacaa gaggaaaggc ttcaatgaag ggctgtggga gatccagaac	300
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gaggccaaacc cgcgcgacgg cagttagct gacgaggacg atgaggacccg ggggggtcatg	420
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gacaagagta ggcacaacag tggcctgaag aggaagacgc ctgcgtctaa gatgtcggtc	540
tcgaaaccgag cccgaaaggc ctccagcgac ctggatcagg ccagctgtc cccatccgaa	600
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tggaaaggccg gcccggcgc aagcagaaga ggagctgcgg cgcctgcggg agcagaaaaa	1080
aagagaagaa cggagcgcgc acggccgcac cgcggggcgc tactgggcac ggcggcacac	1140
cgggacgaac tcacccaaga cataccgtc cataaccggg accaaggccg ggcgggtcc	1200
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<210> 25  
<211> 577  
<212> DNA  
<213> Homo sapiens

<400> 25	
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gtgtttctc agggggcggc ttctcaggaa gggactatga accgaggggg tttcttctg	180
tcagtcaacg ggcgcctcact ggctggctta gcccacggg atgtcctgaa gggtctgcac	240
caggcacacg tgcacaaaaga tgcctctgt gtcataaga aagggtatgg tcagcccagg	300
ccctctggcc ggcaggagcc tcccacagcc aatgggaagg gtttgcgtc cagaaagacc	360
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<210> 26  
<211> 675

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 26

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cgccgcgcac	tacatcgccc	accgtaaagg	ctggctgtcg	ctgcacacag	gtaaccttgg	240
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ggagatctgt	gcccgttcc	tgagggcagg	gtctccacac	aagtactact	tcctcgtggg	420
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tgtgccttca	aagggtgtgt	ataagtacct	ctagaacaat	ccccttttt	ccatcaagct	540
gtagcctgca	gagaatggaa	acgtggaaa	ggaatggat	gtggggaaa	tgcatcccct	600
cagaggactg	aggcatagtc	tctcatctgc	tattgaataa	agaccttcta	tcttgaaaaaa	660
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	675

&lt;210&gt; 27

&lt;211&gt; 1558

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 27

cgagaaaccg	cgcttcgct	tctggtcgca	gagacctcg	agaccgcg	ggggagacgg	60
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cactgccc	ctccggaa	cttttccc	tgctgttt	ccttacccg	gtctgtcat	180
cgccccggac	ctggccggg	ggaggcttgg	ccggcgggag	atgtcttag	ggcgcgcgg	240
gaggagcggc	cggccggacg	gagggccccc	caggaagatg	ggctcccg	gacagggact	300
cttgctggcg	tactgcctgc	tcctgcctt	tgcctctggc	ctggctctga	gtcgctgccc	360
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&lt;210&gt; 28

&lt;211&gt; 563

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 28

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ggccctggaa	gttgcactc	cagtgcac	cagccttgc	ctaataaaat	taagttgcat	420
cattttgtct	gacttaggtgt	ccttctataa	tattatgggg	tggagggggg	tggtatggag	480
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gagtgcagt	gcacaatctt	ggc				563

<210> 29  
<211> 2139  
<212> DNA  
<213> *Homo sapiens*

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<210> 30  
<211> 184

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 30

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1

5

10

15

Pro Gly Arg Gly Gln Thr Gln Gln Glu Glu Glu Glu Asp Glu Asp

20

25

30

His Gly Pro Asp Asp Tyr Asp Glu Glu Asp Glu Asp Glu Val Glu Glu

35

40

45

Glu Glu Thr Asn Arg Leu Pro Gly Gly Arg Ser Arg Val Leu Leu Arg

50

55

60

Cys Tyr Thr Cys Lys Ser Leu Pro Arg Asp Glu Arg Cys Asn Leu Thr

65

70

75

80

Gln Asn Cys Ser His Gly Gln Thr Cys Thr Thr Leu Ile Ala His Gly

85

90

95

Asn Thr Glu Ser Gly Leu Leu Thr Thr His Ser Thr Trp Cys Thr Asp

100

105

110

Ser Cys Gln Pro Ile Thr Lys Thr Val Glu Gly Thr Gln Val Thr Met

115

120

125

Thr Cys Cys Gln Ser Ser Leu Cys Asn Val Pro Pro Trp Gln Ser Ser

130

135

140

Arg Val Gln Asp Pro Thr Gly Lys Gly Ala Gly Gly Pro Arg Gly Ser

145

150

155

160

Ser Glu Thr Val Gly Ala Ala Leu Leu Leu Asn Leu Leu Ala Gly Leu

165

170

175

Gly Ala Met Gly Ala Arg Arg Pro

180

&lt;210&gt; 31

&lt;211&gt; 352

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 31

Met Val Glu Ala Leu Arg Ala Gly Ser Ala Arg Leu Val Ala Ala Pro

1

5

10

15

Val Ala Thr Ala Asn Pro Ala Arg Cys Leu Ala Leu Asn Val Ser Leu

20

25

30

Arg Glu Trp Thr Ala Arg Tyr Gly Ala Ala Pro Ala Ala Pro Arg Cys

35

40

45

Asp Ala Leu Asp Gly Asp Ala Val Val Leu Leu Arg Ala Arg Asp Leu

50

55

60

Phe Asn Leu Ser Ala Pro Leu Ala Arg Pro Val Gly Thr Ser Leu Phe  
 65 70 75 80  
 Leu Gln Thr Ala Leu Arg Gly Trp Ala Val Gln Leu Leu Asp Leu Thr  
 85 90 95  
 Phe Ala Ala Ala Arg Gln Pro Pro Leu Ala Thr Ala His Ala Arg Trp  
 100 105 110  
 Lys Ala Glu Arg Glu Gly Arg Ala Arg Arg Ala Ala Leu Leu Arg Ala  
 115 120 125  
 Leu Gly Ile Arg Leu Val Ser Trp Glu Gly Gly Arg Leu Glu Trp Phe  
 130 135 140  
 Gly Cys Asn Lys Glu Thr Thr Arg Cys Phe Gly Thr Val Val Gly Asp  
 145 150 155 160  
 Thr Pro Ala Tyr Leu Tyr Glu Glu Arg Trp Thr Pro Pro Cys Cys Leu  
 165 170 175  
 Arg Ala Leu Arg Glu Thr Ala Arg Tyr Val Val Gly Val Leu Glu Ala  
 180 185 190  
 Ala Gly Val Arg Tyr Trp Leu Glu Gly Gly Ser Leu Leu Gly Ala Ala  
 195 200 205  
 Arg His Gly Asp Ile Ile Pro Trp Asp Tyr Asp Val Asp Leu Gly Ile  
 210 215 220  
 Tyr Leu Glu Asp Val Gly Asn Cys Glu Gln Leu Arg Gly Ala Glu Ala  
 225 230 235 240  
 Gly Ser Val Val Asp Glu Arg Gly Phe Val Trp Glu Lys Ala Val Glu  
 245 250 255  
 Gly Asp Phe Phe Arg Val Gln Tyr Ser Glu Ser Asn His Leu His Val  
 260 265 270  
 Asp Leu Trp Pro Phe Tyr Pro Arg Asn Gly Val Met Thr Lys Asp Thr  
 275 280 285  
 Trp Leu Asp His Arg Gln Asp Val Glu Phe Pro Glu His Phe Leu Gln  
 290 295 300  
 Pro Leu Val Pro Leu Pro Phe Ala Gly Phe Val Ala Gln Ala Pro Asn  
 305 310 315 320  
 Asn Tyr Arg Arg Phe Leu Glu Leu Lys Phe Gly Pro Gly Val Ile Glu  
 325 330 335  
 Asn Pro Gln Tyr Pro Asn Pro Ala Leu Leu Ser Leu Thr Gly Ser Gly  
 340 345 350

<210> 32  
 <211> 448  
 <212> PRT  
 <213> Homo sapiens

<400> 32  
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 20 25 30  
 Ala Leu Ser Tyr Val Ser Glu Ile Gly Lys Ala Pro Leu Gln Arg Ala  
 35 40 45  
 Leu Gln Val Thr Val Pro His Phe Leu Asp Trp Ser Gly Glu Ala Leu  
 50 55 60  
 Gln Pro Thr Arg Ile Arg Ile Leu Asn Val His Val Pro Arg Leu His  
 65 70 75 80  
 Leu Lys Phe Ile Ala Gly Phe Gly Val Arg Leu Leu Ala Ala Asn  
 85 90 95  
 Phe Thr Phe Lys Val Phe Arg Ala Pro Glu Pro Leu Glu Leu Thr Leu  
 100 105 110  
 Pro Val Glu Leu Leu Ala Asp Thr Arg Val Thr Gln Ser Ser Ile Arg  
 115 120 125  
 Thr Pro Val Val Ser Ile Ser Ala Cys Ser Leu Phe Ser Gly His Ala  
 130 135 140  
 Asn Glu Phe Asp Gly Ser Asn Ser Thr Ser His Ala Leu Leu Val Leu  
 145 150 155 160  
 Val Gln Lys His Ile Lys Ala Val Leu Ser Asn Lys Leu Cys Leu Ser  
 165 170 175  
 Ile Ser Asn Leu Val Gln Gly Val Asn Val His Leu Gly Thr Leu Ile  
 180 185 190  
 Gly Leu Asn Pro Val Gly Pro Glu Ser Gln Ile Arg Tyr Ser Met Val  
 195 200 205  
 Ser Val Pro Thr Val Thr Ser Asp Tyr Ile Ser Leu Glu Val Asn Ala  
 210 215 220  
 Val Leu Phe Leu Leu Gly Lys Pro Ile Ile Leu Pro Thr Asp Ala Thr  
 225 230 235 240  
 Pro Phe Val Leu Pro Arg His Val Gly Thr Glu Gly Ser Met Ala Thr  
 245 250 255  
 Val Gly Leu Ser Gln Gln Leu Phe Asp Ser Ala Leu Leu Leu Gln  
 260 265 270

Lys Ala Gly Ala Leu Asn Leu Asp Ile Thr Gly Gln Leu Arg Ser Asp  
 275 280 285  
 Asp Asn Leu Leu Asn Thr Ser Ala Leu Gly Arg Leu Ile Pro Glu Val  
 290 295 300  
 Ala Arg Gln Phe Pro Glu Pro Met Pro Val Val Leu Lys Val Arg Leu  
 305 310 315 320  
 Gly Ala Thr Pro Val Ala Met Leu His Thr Asn Asn Ala Thr Leu Arg  
 325 330 335  
 Leu Gln Pro Phe Val Glu Val Leu Ala Thr Ala Ser Asn Ser Ala Phe  
 340 345 350  
 Gln Ser Leu Phe Ser Leu Asp Val Val Val Asn Leu Arg Leu Gln Leu  
 355 360 365  
 Ser Val Ser Lys Val Lys Leu Gln Gly Thr Thr Ser Val Leu Gly Asp  
 370 375 380  
 Val Gln Leu Thr Val Ala Ser Ser Asn Val Gly Phe Ile Asp Thr Asp  
 385 390 395 400  
 Gln Val Arg Thr Leu Met Gly Thr Val Phe Glu Lys Pro Leu Leu Asp  
 405 410 415  
 His Leu Asn Ala Leu Leu Ala Met Gly Ile Ala Leu Pro Gly Val Val  
 420 425 430  
 Asn Leu His Tyr Val Pro Leu Arg Ser Leu Ser Met Arg Ala Thr Trp  
 435 440 445

<210> 33  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<400> 33  
 Met Glu Pro Glu Glu Gly Thr Pro Leu Trp Arg Leu Gln Lys Leu Pro  
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 Ala Glu Leu Gly Pro Gln Leu Leu His Lys Ile Ile Asp Gly Ile Cys  
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 Gly Arg Ala Tyr Pro Val Tyr Gln Asp Tyr His Thr Val Trp Glu Ser  
 35 40 45  
 Glu Glu Trp Met His Val Leu Glu Asp Ile Ala Lys Phe Phe Lys Ala  
 50 55 60  
 Ile Val Gly Lys Asn Leu Pro Asp Glu Glu Ile Phe Gln Gln Leu Asn  
 65 70 75 80

Gln Leu Asn Ser Leu His Gln Glu Thr Ile Met Lys Cys Val Lys Ser  
 85 90 95

Arg Lys Asp Glu Ile Lys Gln Ala Leu Ser Arg Glu Ile Val Ala Ile  
 100 105 110

Ser Ser Ala Gln Leu Gln Asp Phe Asp Trp Gln Val Lys Leu Ala Leu  
 115 120 125

Ser Ser Asp Lys Ile Ala Ala Leu Arg Met Pro Leu Leu Ser Leu His  
 130 135 140

Leu Asp Val Lys Glu Asn Gly Glu Val Lys Pro Tyr Ser Ile Glu Met  
 145 150 155 160

Ser Arg Glu Glu Leu Gln Asn Leu Ile Gln Ser Leu Glu Ala Ala Asn  
 165 170 175

Lys Val Val Leu Gln Leu Lys  
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<210> 34

<211> 121

<212> PRT

<213> Homo sapiens

<400> 34

Met Pro Cys Gly Arg Gln His Leu Gln Asn Leu Asp Asp Ala Val Asn  
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Gly Ser Ala Trp Thr Ile Leu Leu Thr Glu Asn Phe Leu Arg Asp  
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Thr Trp Cys Asn Phe Gln Phe Tyr Thr Ser Leu Met Asn Ser Val Asn  
 35 40 45

Arg Gln His Lys Tyr Asn Ser Val Ile Pro Met Arg Pro Leu Asn Asn  
 50 55 60

Pro Leu Pro Arg Glu Arg Thr Pro Phe Ala Leu Gln Thr Ile Asn Ala  
 65 70 75 80

Leu Glu Glu Glu Ser Arg Gly Phe Pro Thr Gln Val Glu Arg Ile Phe  
 85 90 95

Gln Glu Ser Val Tyr Lys Thr Gln Gln Thr Ile Trp Lys Glu Thr Arg  
 100 105 110

Asn Met Val Gln Arg Gln Phe Ile Ala  
 115 120

<210> 35

<211> 251

<212> PRT

<213> Homo sapiens

<400> 35  
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 Val Val Thr Ile Ala Val Tyr Ser Phe Phe Ala Leu Ser Leu Val Gly  
 20 25 30  
 Arg Gln Phe Val Glu Pro Glu Ala Gly Ala Ala Lys Pro Gln Lys Leu  
 35 40 45  
 Leu Lys Pro Gly Gln Glu Pro Ala Pro Ala Leu Gly Asp Pro Asp Met  
 50 55 60  
 Tyr Val Pro Leu Thr Thr Leu Leu Gln Phe Phe Tyr Ala Gly Trp  
 65 70 75 80  
 Leu Lys Val Ala Glu Gln Ile Ile Asn Pro Phe Gly Glu Asp Asp Asp  
 85 90 95  
 Asp Phe Glu Thr Asn Gln Leu Ile Asp Arg Asn Leu Gln Val Ser Leu  
 100 105 110  
 Leu Ser Val Asp Glu Met Tyr Gln Asn Leu Pro Pro Ala Glu Lys Asp  
 115 120 125  
 Gln Tyr Trp Asp Glu Asp Gln Pro Gln Pro Pro Tyr Thr Val Ala Thr  
 130 135 140  
 Ala Ala Glu Ser Leu Arg Pro Ser Phe Leu Gly Ser Thr Phe Asn Leu  
 145 150 155 160  
 Arg Met Ser Asp Asp Pro Glu Gln Ser Leu Gln Val Glu Ala Ser Pro  
 165 170 175  
 Gly Ser Gly Arg Pro Ala Pro Ala Ala Gln Thr Pro Leu Leu Gly Arg  
 180 185 190  
 Phe Leu Gly Val Gly Ala Pro Ser Pro Ala Ile Ser Leu Arg Asn Phe  
 195 200 205  
 Gly Arg Val Arg Gly Thr Pro Arg Pro Pro His Leu Leu Arg Phe Arg  
 210 215 220  
 Ala Glu Glu Gly Gly Asp Pro Glu Ala Ala Ala Arg Ile Glu Glu Glu  
 225 230 235 240  
 Ser Ala Glu Ser Gly Asp Glu Ala Leu Glu Pro  
 245 250

<210> 36  
 <211> 125  
 <212> PRT  
 <213> Homo sapiens

<400> 36  
 Met Arg Pro Gly Lys Lys Val Leu Val Met Gly Ile Val Asp Leu Asn  
 1 5 10 15

Pro Glu Ser Phe Ala Ile Ser Leu Thr Cys Gly Asp Ser Glu Asp Pro  
 20 25 30

Pro Ala Asp Val Ala Ile Glu Leu Lys Ala Val Phe Thr Asp Arg Gln  
 35 40 45

Leu Leu Arg Asn Ser Cys Ile Ser Gly Glu Arg Gly Glu Gln Ser  
 50 55 60

Ala Ile Pro Tyr Phe Pro Phe Ile Pro Asp Gln Pro Phe Arg Val Glu  
 65 70 75 80

Ile Leu Cys Glu His Pro Arg Phe Arg Val Phe Val Asp Gly His Gln  
 85 90 95

Leu Phe Asp Phe Tyr His Arg Ile Gln Thr Leu Ser Ala Ile Asp Thr  
 100 105 110

Ile Lys Ile Asn Gly Asp Leu Gln Ile Thr Lys Leu Gly  
 115 120 125

<210> 37

<211> 170

<212> PRT

<213> Homo sapiens

<400> 37

Met Ile Ser Ile His Asn Glu Glu Asn Ala Phe Ile Leu Asp Thr  
 1 5 10 15

Leu Lys Lys Gln Trp Lys Gly Pro Asp Asp Ile Leu Leu Gly Met Phe  
 20 25 30

Tyr Asp Thr Asp Asp Ala Ser Phe Lys Trp Phe Asp Asn Ser Asn Met  
 35 40 45

Thr Phe Asp Lys Trp Thr Asp Gln Asp Asp Asp Glu Asp Leu Val Asp  
 50 55 60

Thr Cys Ala Phe Leu His Ile Lys Thr Gly Glu Trp Lys Lys Gly Asn  
 65 70 75 80

Cys Glu Val Ser Ser Val Glu Gly Thr Leu Cys Lys Thr Ala Ile Pro  
 85 90 95

Tyr Lys Arg Lys Tyr Leu Ser Asp Asn His Ile Leu Ile Ser Ala Leu  
 100 105 110

Val Ile Ala Ser Thr Val Ile Leu Thr Val Leu Gly Ala Ile Ile Trp  
 115 120 125

Phe Leu Tyr Lys Lys His Ser Asp Ser Arg Phe Thr Thr Val Phe Ser  
 130 135 140

Thr Ala Pro Gln Ser Pro Tyr Asn Glu Asp Cys Val Leu Val Val Gly  
 145 150 155 160

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Glu Glu Asn Glu Tyr Pro Val Gln Phe Asp  
 165 170

<210> 38  
 <211> 535  
 <212> PRT  
 <213> Homo sapiens

<400> 38  
 Met Leu Leu Leu Leu Leu Leu Pro Pro Leu Leu Cys Gly Arg Val  
 1 5 10 15

Gly Ala Lys Glu Gln Lys Asp Tyr Leu Leu Thr Met Gln Lys Ser Val  
 20 25 30

Thr Val Gln Glu Gly Leu Cys Val Ser Val Leu Cys Ser Phe Ser Tyr  
 35 40 45

Pro Gln Asn Gly Trp Thr Ala Ser Asp Pro Val His Gly Tyr Trp Phe  
 50 55 60

Arg Ala Gly Asp His Val Ser Arg Asn Ile Pro Val Ala Thr Asn Asn  
 65 70 75 80

Pro Ala Arg Ala Val Gln Glu Glu Thr Arg Asp Arg Phe His Leu Leu  
 85 90 95

Gly Asp Pro Gln Asn Lys Asp Cys Thr Leu Ser Ile Arg Asp Thr Arg  
 100 105 110

Glu Ser Asp Ala Gly Thr Tyr Val Phe Cys Val Glu Arg Gly Asn Met  
 115 120 125

Lys Trp Asn Tyr Lys Tyr Asp Gln Leu Ser Val Asn Val Thr Ala Ser  
 130 135 140

Gln Asp Leu Leu Ser Arg Tyr Arg Leu Glu Val Pro Glu Ser Val Thr  
 145 150 155 160

Val Gln Glu Gly Leu Cys Val Ser Val Pro Cys Ser Val Leu Tyr Pro  
 165 170 175

His Tyr Asn Trp Thr Ala Ser Ser Pro Val Tyr Gly Ser Trp Phe Lys  
 180 185 190

Glu Gly Ala Asp Ile Pro Trp Asp Ile Pro Val Ala Thr Asn Thr Pro  
 195 200 205

Ser Gly Lys Val Gln Glu Asp Thr His Gly Arg Phe Leu Leu Leu Gly  
 210 215 220

Asp Pro Gln Thr Asn Asn Cys Ser Leu Ser Ile Arg Asp Ala Arg Lys  
 225 230 235 240

Gly Asp Ser Gly Lys Tyr Tyr Phe Gln Val Glu Arg Gly Ser Arg Lys  
 245 250 255

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Trp Asn Tyr Ile Tyr Asp Lys Leu Ser Val His Val Thr Ala Leu Thr  
 260 265 270  
 His Met Pro Thr Phe Ser Ile Pro Gly Thr Leu Glu Ser Gly His Pro  
 275 280 285  
 Arg Asn Leu Thr Cys Ser Val Pro Trp Ala Cys Glu Gln Gly Thr Pro  
 290 295 300  
 Pro Thr Ile Thr Trp Met Gly Ala Ser Val Ser Ser Leu Asp Pro Thr  
 305 310 315 320  
 Ile Thr Arg Ser Ser Met Leu Ser Leu Ile Pro Gln Pro Gln Asp His  
 325 330 335  
 Gly Thr Ser Leu Thr Cys Gln Val Thr Leu Pro Gly Ala Gly Val Thr  
 340 345 350  
 Met Thr Arg Ala Val Arg Leu Asn Ile Ser Tyr Pro Pro Gln Asn Leu  
 355 360 365  
 Thr Met Thr Val Phe Gln Gly Asp Gly Thr Ala Ser Thr Thr Leu Arg  
 370 375 380  
 Asn Gly Ser Ala Leu Ser Val Leu Glu Gly Gln Ser Leu His Leu Val  
 385 390 395 400  
 Cys Ala Val Asp Ser Asn Pro Pro Ala Arg Leu Ser Trp Thr Trp Gly  
 405 410 415  
 Ser Leu Thr Leu Ser Pro Ser Gln Ser Ser Asn Leu Gly Val Leu Glu  
 420 425 430  
 Leu Pro Arg Val His Val Lys Asp Glu Gly Glu Phe Thr Cys Arg Ala  
 435 440 445  
 Gln Asn Pro Leu Gly Ser Gln His Ile Ser Leu Ser Leu Ser Leu Gln  
 450 455 460  
 Asn Glu Tyr Thr Gly Lys Met Arg Pro Ile Ser Gly Val Thr Leu Gly  
 465 470 475 480  
 Ala Phe Gly Gly Ala Gly Ala Thr Ala Leu Val Phe Leu Tyr Phe Cys  
 485 490 495  
 Ile Ile Phe Val Val Val Arg Ser Cys Arg Lys Lys Ser Ala Arg Pro  
 500 505 510  
 Ala Val Ala Trp Gly Ile Gln Ala Trp Arg Thr Gln Thr Leu Ser Gly  
 515 520 525  
 Ala Gln Pro Leu Arg Asp Pro  
 530 535

&lt;210&gt; 39

&lt;211&gt; 274

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

<400> 39															
Met	Ser	Ser	Asn	Gly	Ile	Pro	Glu	Cys	Tyr	Ala	Glu	Glu	Asp	Glu	Phe
1					5					10					15
Ser Gly Leu Glu Thr Asp Thr Ala Val Pro Thr Glu Glu Ala Tyr Val															
20 25 30															
Ile Tyr Asp Glu Asp Tyr Glu Phe Glu Thr Ser Arg Pro Pro Thr Thr															
35 40 45															
Thr Glu Pro Ser Thr Thr Ala Thr Thr Pro Arg Val Ile Pro Glu Glu															
50 55 60															
Gly Ala Ile Ser Ser Phe Pro Glu Glu Glu Phe Asp Leu Ala Gly Arg															
65 70 75 80															
Lys Arg Phe Val Ala Pro Tyr Val Thr Tyr Leu Asn Lys Asp Pro Ser															
85 90 95															
Ala Pro Cys Ser Leu Thr Asp Ala Leu Asp His Phe Gln Val Asp Ser															
100 105 110															
Leu Asp Glu Ile Ile Pro Asn Asp Leu Lys Lys Ser Asp Leu Pro Pro															
115 120 125															
Gln His Ala Pro Arg Asn Ile Thr Val Val Ala Val Glu Gly Cys His															
130 135 140															
Ser Phe Val Ile Val Asp Trp Asp Lys Ala Thr Pro Gly Asp Val Val															
145 150 155 160															
Thr Gly Tyr Leu Val Tyr Ser Ala Ser Tyr Glu Asp Phe Ile Arg Asn															
165 170 175															
Lys Trp Ser Thr Gln Ala Ser Ser Val Thr His Leu Pro Ile Glu Asn															
180 185 190															
Leu Lys Pro Asn Thr Arg Tyr Tyr Phe Lys Val Gln Ala Gln Asn Pro															
195 200 205															
His Gly Tyr Gly Pro Ile Ser Pro Ser Val Ser Phe Val Thr Glu Ser															
210 215 220															
Asp Asn Pro Leu Leu Val Val Arg Pro Pro Gly Gly Glu Pro Ile Trp															
225 230 235 240															
Ile Pro Phe Ala Phe Lys His Asp Pro Ser Tyr Thr Asp Cys His Gly															
245 250 255															
Arg Gln Tyr Val Lys Arg Thr Leu Val Ser Lys Val Arg Gly Ser Trp															
260 265 270															
Ser Leu															

<210> 40  
 <211> 468  
 <212> PRT  
 <213> Homo sapiens

<400> 40  
 Met Pro Ala Leu His Thr Leu Asn Leu Asp His Asn Leu Ile Asp Ala  
 1 5 10 15  
 Leu Pro Pro Gly Ala Phe Ala Gln Leu Gly Gln Leu Ser Arg Leu Asp  
 20 25 30  
 Leu Thr Ser Asn Arg Leu Ala Thr Leu Ala Pro Asp Pro Leu Phe Ser  
 35 40 45  
 Arg Gly Arg Asp Ala Glu Ala Ser Pro Ala Pro Leu Val Leu Ser Phe  
 50 55 60  
 Ser Gly Asn Pro Leu His Cys Asn Cys Glu Leu Leu Trp Leu Arg Arg  
 65 70 75 80  
 Leu Ala Arg Pro Asp Asp Leu Glu Thr Cys Ala Ser Pro Pro Gly Leu  
 85 90 95  
 Ala Gly Arg Tyr Phe Trp Ala Val Pro Glu Gly Glu Phe Ser Cys Glu  
 100 105 110  
 Pro Pro Leu Ile Ala Arg His Thr Gln Arg Leu Trp Val Leu Glu Gly  
 115 120 125  
 Gln Arg Ala Thr Leu Arg Cys Arg Ala Leu Gly Asp Pro Ala Pro Thr  
 130 135 140  
 Met His Trp Val Gly Pro Asp Asp Arg Leu Val Gly Asn Ser Ser Arg  
 145 150 155 160  
 Ala Arg Ala Phe Pro Asn Gly Thr Leu Glu Ile Gly Ala Thr Gly Ala  
 165 170 175  
 Gly Asp Ala Gly Gly Tyr Thr Cys Ile Ala Thr Asn Pro Ala Gly Glu  
 180 185 190  
 Ala Thr Ala Arg Val Glu Leu Arg Val Leu Ala Leu Pro His Gly Gly  
 195 200 205  
 Asn Ser Ser Ala Glu Gly Gly Arg Pro Gly Pro Ser Asp Ile Ala Ala  
 210 215 220  
 Ser Ala Arg Thr Ala Ala Glu Gly Glu Gly Thr Leu Glu Ser Glu Pro  
 225 230 235 240  
 Ala Val Gln Val Thr Glu Val Thr Ala Thr Ser Gly Leu Val Ser Trp  
 245 250 255  
 Gly Pro Gly Arg Pro Ala Asp Pro Val Trp Met Phe Gln Ile Gln Tyr  
 260 265 270

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Asn Ser Ser Glu Asp Glu Thr Leu Ile Tyr Arg Ile Val Pro Ala Ser  
 275 280 285  
 Ser His His Phe Leu Leu Lys His Leu Val Pro Gly Ala Asp Tyr Asp  
 290 295 300  
 Leu Cys Leu Leu Ala Leu Ser Pro Ala Ala Gly Pro Ser Asp Leu Thr  
 305 310 315 320  
 Ala Thr Arg Leu Leu Gly Cys Ala His Phe Ser Thr Leu Pro Ala Ser  
 325 330 335  
 Pro Leu Cys His Ala Leu Gln Ala His Val Leu Gly Gly Thr Leu Thr  
 340 345 350  
 Val Ala Val Gly Gly Val Leu Val Ala Ala Leu Leu Val Phe Thr Val  
 355 360 365  
 Ala Leu Leu Val Arg Gly Arg Gly Ala Gly Asn Gly Arg Leu Pro Leu  
 370 375 380  
 Lys Leu Ser His Val Gln Ser Gln Thr Asn Gly Gly Pro Ser Pro Thr  
 385 390 395 400  
 Pro Lys Ala His Pro Pro Arg Ser Pro Pro Pro Arg Pro Gln Arg Ser  
 405 410 415  
 Cys Ser Leu Asp Leu Gly Asp Ala Gly Cys Tyr Gly Tyr Ala Arg Arg  
 420 425 430  
 Leu Gly Gly Ala Trp Ala Arg Arg Ser His Ser Val His Gly Gly Leu  
 435 440 445  
 Leu Gly Ala Gly Cys Arg Gly Val Gly Gly Ser Ala Glu Arg Leu Glu  
 450 455 460  
 Glu Ser Val Val  
 465

<210> 41  
 <211> 203  
 <212> PRT  
 <213> Homo sapiens

<400> 41  
 Met Ala Arg Pro Arg Pro Arg Glu Tyr Lys Ala Gly Asp Leu Val Phe  
 1 5 10 15

Ala Lys Met Lys Gly Tyr Pro His Trp Pro Ala Arg Ile Asp Glu Leu  
 20 25 30

Pro Glu Gly Ala Val Lys Pro Pro Ala Asn Lys Tyr Pro Ile Phe Phe  
 35 40 45

Phe Gly Thr His Glu Thr Ala Phe Leu Gly Pro Lys Asp Leu Phe Pro  
 50 55 60

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Tyr Lys Glu Tyr Lys Asp Lys Phe Gly Lys Ser Asn Lys Arg Lys Gly  
 65 70 75 80

Phe Asn Glu Gly Leu Trp Glu Ile Glu Asn Asn Pro Gly Val Lys Phe  
 85 90 95

Thr Gly Tyr Gln Ala Ile Gln Gln Ser Ser Ser Glu Thr Glu Gly  
 100 105 110

Glu Gly Asn Thr Ala Asp Ala Ser Ser Glu Glu Glu Gly Asp Arg  
 115 120 125

Val Glu Glu Asp Gly Lys Gly Lys Arg Lys Asn Glu Lys Ala Gly Ser  
 130 135 140

Lys Arg Lys Lys Ser Tyr Thr Ser Lys Lys Ser Ser Lys Gln Ser Arg  
 145 150 155 160

Lys Ser Pro Gly Asp Glu Asp Asp Lys Asp Cys Lys Glu Glu Asn  
 165 170 175

Lys Ser Ser Ser Glu Gly Asp Ala Gly Asn Asp Thr Arg Asn Thr  
 180 185 190

Thr Ser Asp Leu Gln Lys Thr Ser Glu Gly Thr  
 195 200

<210> 42

<211> 253

<212> PRT

<213> Homo sapiens

<400> 42

Met Arg Ser Gly Lys Met Ala Pro Lys Pro Gln Ser Arg Cys Thr Ser  
 1 5 10 15

Thr Arg Ser Ala Gly Glu Ala Pro Ser Glu Asn Gln Ser Pro Ser Lys  
 20 25 30

Gly Pro Glu Glu Ala Ser Ser Glu Val Gln Asp Thr Asn Glu Val His  
 35 40 45

Val Pro Gly Asp Gln Asp Glu Pro Gln Thr Leu Gly Lys Lys Gly Ser  
 50 55 60

Lys Asn Asn Ile Ser Val Tyr Met Thr Leu Asn Gln Lys Lys Ser Asp  
 65 70 75 80

Ser Ser Ser Ala Ser Val Cys Ser Ile Asp Ser Thr Asp Asp Leu Lys  
 85 90 95

Ser Ser Asn Ser Glu Cys Ser Ser Glu Ser Phe Asp Phe Pro Pro  
 100 105 110

Gly Ser Met His Ala Pro Ser Thr Ser Ser Thr Ser Ser Ser Lys  
 115 120 125

Glu Glu Lys Lys Leu Ser Asn Ser Leu Lys Met Lys Val Phe Ser Lys  
 130 135 140

Asn Val Ser Lys Cys Val Thr Pro Asp Gly Arg Thr Ile Cys Val Gly  
 145 150 155 160

Asp Ile Val Trp Ala Lys Ile Tyr Gly Phe Pro Trp Trp Pro Ala Arg  
 165 170 175

Ile Leu Thr Ile Thr Val Ser Arg Lys Asp Asn Gly Leu Leu Val Arg  
 180 185 190

Gln Glu Ala Arg Ile Ser Trp Phe Gly Ser Pro Thr Thr Ser Phe Leu  
 195 200 205

Ala Leu Ser Gln Leu Ser Pro Phe Leu Glu Asn Phe Gln Ser Arg Phe  
 210 215 220

Asn Lys Lys Arg Lys Gly Leu Tyr Arg Lys Ala Ile Thr Glu Ala Ala  
 225 230 235 240

Lys Ala Ala Lys Gln Leu Thr Pro Glu Val Arg Ala Cys  
 245 250

<210> 43

<211> 314

<212> PRT

<213> Homo sapiens

<400> 43

Met Pro His Ala Phe Lys Pro Gly Asp Leu Val Phe Ala Lys Met Lys  
 1 5 10 15

Gly Tyr Pro His Trp Pro Ala Arg Ile Asp Asp Ile Ala Asp Gly Ala  
 20 25 30

Val Lys Pro Pro Pro Asn Lys Tyr Pro Ile Phe Phe Gly Thr His  
 35 40 45

Glu Thr Ala Phe Leu Gly Pro Lys Asp Leu Phe Pro Tyr Asp Lys Cys  
 50 55 60

Lys Asp Lys Tyr Gly Lys Pro Asn Lys Arg Lys Gly Phe Asn Glu Gly  
 65 70 75 80

Leu Trp Glu Ile Gln Asn Asn Pro His Ala Ser Tyr Ser Ala Pro Pro  
 85 90 95

Pro Val Ser Ser Ser Asp Ser Glu Ala Pro Glu Ala Asn Pro Ala Asp  
 100 105 110

Gly Ser Asp Ala Asp Glu Asp Asp Glu Asp Arg Gly Val Met Ala Val  
 115 120 125

Thr Ala Val Thr Ala Thr Ala Ala Ser Asp Arg Met Glu Ser Asp Ser  
 130 135 140

Asp Ser Asp Lys Ser Ser Asp Asn Ser Gly Leu Lys Arg Lys Thr Pro  
 145 150 155 160  
 Ala Leu Lys Met Ser Val Ser Lys Arg Ala Arg Lys Ala Ser Ser Asp  
 165 170 175  
 Leu Asp Gln Ala Ser Val Ser Pro Ser Glu Glu Glu Asn Ser Glu Ser  
 180 185 190  
 Ser Ser Glu Ser Glu Lys Thr Ser Asp Gln Asp Phe Thr Pro Glu Lys  
 195 200 205  
 Lys Ala Ala Val Arg Ala Pro Arg Arg Gly Pro Leu Gly Gly Arg Lys  
 210 215 220  
 Lys Lys Lys Ala Pro Ser Ala Ser Asp Ser Lys Ala Asp Ser  
 225 230 235 240  
 Asp Gly Ala Lys Pro Glu Pro Val Ala Met Ala Arg Ser Ala Ser Ser  
 245 250 255  
 Ser Ser Ser Ser Ser Ser Asp Ser Asp Val Ser Val Lys Lys  
 260 265 270  
 Pro Pro Arg Gly Arg Lys Pro Thr Glu Lys Pro Leu Pro Lys Pro Arg  
 275 280 285  
 Gly Arg Lys Pro Lys Pro Glu Arg Pro Pro Ser Ser Ser Ser Asp  
 290 295 300  
 Ser Asp Ser Asp Glu Val Asp Arg Ile Thr  
 305 310

<210> 44  
 <211> 86  
 <212> PRT  
 <213> Homo sapiens

<400> 44  
 Met Asn Arg Gly Asp Phe Leu Leu Ser Val Asn Gly Ala Ser Leu Ala  
 1 5 10 15  
 Gly Leu Ala His Gly Asn Val Leu Lys Val Leu His Gln Ala Gln Leu  
 20 25 30  
 His Lys Asp Ala Leu Val Val Ile Lys Lys Gly Met Asp Gln Pro Arg  
 35 40 45  
 Pro Ser Ala Arg Gln Glu Pro Pro Thr Ala Asn Gly Lys Gly Leu Leu  
 50 55 60  
 Ser Arg Lys Thr Ile Pro Leu Glu Pro Gly Ile Gly Lys Met Ile Ile  
 65 70 75 80  
 Ser Thr Thr Ser Arg Leu  
 85

<210> 45  
 <211> 167  
 <212> PRT  
 <213> Homo sapiens

<400> 45  
 Met Ala Ala Ser Val Cys Ser Gly Leu Leu Gly Pro Arg Val Leu Ser  
 1 5 10 15  
 Trp Ser Arg Glu Leu Pro Cys Ala Trp Arg Ala Leu His Thr Ser Pro  
 20 25 30  
 Val Cys Ala Lys Asn Arg Ala Ala Arg Val Arg Val Ser Lys Gly Asp  
 35 40 45  
 Lys Pro Val Thr Tyr Glu Glu Ala His Ala Pro His Tyr Ile Ala His  
 50 55 60  
 Arg Lys Gly Trp Leu Ser Leu His Thr Gly Asn Leu Asp Gly Glu Asp  
 65 70 75 80  
 His Ala Ala Glu Arg Thr Val Glu Asp Val Phe Leu Arg Lys Phe Met  
 85 90 95  
 Trp Gly Thr Phe Pro Gly Cys Leu Ala Asp Gln Leu Val Leu Lys Arg  
 100 105 110  
 Arg Gly Asn Gln Leu Glu Ile Cys Ala Val Val Leu Arg Gln Leu Ser  
 115 120 125  
 Pro His Lys Tyr Tyr Phe Leu Val Gly Tyr Ser Glu Thr Leu Leu Ser  
 130 135 140  
 Tyr Phe Tyr Lys Cys Pro Val Arg Leu His Leu Gln Thr Val Pro Ser  
 145 150 155 160  
 Lys Val Val Tyr Lys Tyr Leu  
 165

<210> 46  
 <211> 281  
 <212> PRT  
 <213> Homo sapiens

<400> 46  
 Met Gly Ser Arg Gly Gln Gly Leu Leu Leu Ala Tyr Cys Leu Leu  
 1 5 10 15  
 Ala Phe Ala Ser Gly Leu Val Leu Ser Arg Val Pro His Val Gln Gly  
 20 25 30  
 Glu Gln Gln Glu Trp Glu Gly Thr Glu Glu Leu Pro Ser Pro Pro Asp  
 35 40 45  
 His Ala Glu Arg Ala Glu Glu Gln His Glu Lys Tyr Arg Pro Ser Gln  
 50 55 60

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Asp Gln Gly Leu Pro Ala Ser Arg Cys Leu Arg Cys Cys Asp Pro Gly  
 65 70 75 80

Thr Ser Met Tyr Pro Ala Thr Ala Val Pro Gln Ile Asn Ile Thr Ile  
 85 90 95

Leu Lys Gly Glu Lys Gly Asp Arg Gly Asp Arg Gly Leu Gln Gly Lys  
 100 105 110

Tyr Gly Lys Thr Gly Ser Ala Gly Ala Arg Gly His Thr Gly Pro Lys  
 115 120 125

Gly Gln Lys Gly Ser Met Gly Ala Pro Gly Glu Arg Cys Lys Ser His  
 130 135 140

Tyr Ala Ala Phe Ser Val Gly Arg Lys Lys Pro Met His Ser Asn His  
 145 150 155 160

Tyr Tyr Gln Thr Val Ile Phe Asp Thr Glu Phe Val Asn Leu Tyr Asp  
 165 170 175

His Phe Asn Met Phe Thr Gly Lys Phe Tyr Cys Tyr Val Pro Gly Leu  
 180 185 190

Tyr Phe Phe Ser Leu Asn Val His Thr Trp Asn Gln Lys Glu Thr Tyr  
 195 200 205

Leu His Ile Met Lys Asn Glu Glu Val Ala Ile Leu Phe Ala Gln  
 210 215 220

Val Gly Asp Arg Ser Ile Met Gln Ser Gln Ser Leu Met Leu Glu Leu  
 225 230 235 240

Arg Glu Gln Asp Gln Val Trp Val Arg Leu Tyr Lys Gly Glu Arg Glu  
 245 250 255

Asn Ala Ile Phe Ser Glu Glu Leu Asp Thr Tyr Ile Thr Phe Ser Gly  
 260 265 270

Tyr Leu Val Lys His Ala Thr Glu Pro  
 275 280

<210> 47  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<400> 47  
 Met Lys Gly Ser Arg Ala Leu Leu Leu Val Ala Leu Thr Leu Phe Cys  
 1 5 10 15

Ile Cys Arg Met Ala Thr Gly Glu Asp Asn Asp Glu Phe Phe Met Asp  
 20 25 30

Phe Leu Gln Thr Leu Leu Val Gly Thr Pro Glu Glu Leu Tyr Glu Gly  
 35 40 45

Thr Leu Gly Lys Tyr Asn Val Asn Glu Asp Ala Lys Ala Ala Met Thr  
 50 55 60

Glu Leu Lys Ser Cys Ile Asp Gly Leu Gln Pro Met His Lys Ala Glu  
 65 70 75 80

Leu Val Lys Leu Leu Val Gln Val Leu Gly Ser Gln Asp Gly Ala Gly  
 85 90 95

Thr Asp Tyr Lys Asp Asp Asp Asp Lys  
 100 105

<210> 48

<211> 595

<212> PRT

<213> Homo sapiens

<400> 48

Met Leu Leu Leu Leu Leu Leu Pro Pro Leu Leu Cys Gly Arg Val  
 1 5 10 15

Gly Ala Lys Glu Gln Lys Asp Tyr Leu Leu Thr Met Gln Lys Ser Val  
 20 25 30

Thr Val Gln Glu Gly Leu Cys Val Ser Val Leu Cys Ser Phe Ser Tyr  
 35 40 45

Pro Gln Asn Gly Trp Thr Ala Ser Asp Pro Val His Gly Tyr Trp Phe  
 50 55 60

Arg Ala Gly Asp His Val Ser Arg Asn Ile Pro Val Ala Thr Asn Asn  
 65 70 75 80

Pro Ala Arg Ala Val Gln Glu Glu Thr Arg Asp Arg Phe His Leu Leu  
 85 90 95

Gly Asp Pro Gln Asn Lys Asp Cys Thr Leu Ser Ile Arg Asp Thr Arg  
 100 105 110

Glu Ser Asp Ala Gly Thr Tyr Val Phe Cys Val Glu Arg Gly Asn Met  
 115 120 125

Lys Trp Asn Tyr Lys Tyr Asp Gln Leu Ser Val Asn Val Thr Ala Ser  
 130 135 140

Gln Asp Leu Leu Ser Arg Tyr Arg Leu Glu Val Pro Glu Ser Val Thr  
 145 150 155 160

Val Gln Glu Gly Leu Cys Val Ser Val Pro Cys Ser Val Leu Tyr Pro  
 165 170 175

His Tyr Asn Trp Thr Ala Ser Ser Pro Val Tyr Gly Ser Trp Phe Lys  
 180 185 190

Glu Gly Ala Asp Ile Pro Trp Asp Ile Pro Val Ala Thr Asn Thr Pro  
 195 200 205

PROTEIN SEQUENCE ALIGNMENT

Ser Gly Lys Val Gln Glu Asp Thr His Gly Arg Phe Leu Leu Leu Gly  
 210 215 220

Asp Pro Gln Thr Asn Asn Cys Ser Leu Ser Ile Arg Asp Ala Arg Lys  
 225 230 235 240

Gly Asp Ser Gly Lys Tyr Tyr Phe Gln Val Glu Arg Gly Ser Arg Lys  
 245 250 255

Trp Asn Tyr Ile Tyr Asp Lys Leu Ser Val His Val Thr Ala Leu Thr  
 260 265 270

His Met Pro Thr Phe Ser Ile Pro Gly Thr Leu Glu Ser Gly His Pro  
 275 280 285

Arg Asn Leu Thr Cys Ser Val Pro Trp Ala Cys Glu Gln Gly Thr Pro  
 290 295 300

Pro Thr Ile Thr Trp Met Gly Ala Ser Val Ser Ser Leu Asp Pro Thr  
 305 310 315 320

Ile Thr Arg Ser Ser Met Leu Ser Leu Ile Pro Gln Pro Gln Asp His  
 325 330 335

Gly Thr Ser Leu Thr Cys Gln Val Thr Leu Pro Gly Ala Gly Val Thr  
 340 345 350

Met Thr Arg Ala Val Arg Leu Asn Ile Ser Tyr Pro Pro Gln Asn Leu  
 355 360 365

Thr Met Thr Val Phe Gln Gly Asp Gly Thr Ala Ser Thr Thr Leu Arg  
 370 375 380

Asn Gly Ser Ala Leu Ser Val Leu Glu Gly Gln Ser Leu His Leu Val  
 385 390 395 400

Cys Ala Val Asp Ser Asn Pro Pro Ala Arg Leu Ser Trp Thr Trp Gly  
 405 410 415

Ser Leu Thr Leu Ser Pro Ser Gln Ser Ser Asn Leu Gly Val Leu Glu  
 420 425 430

Leu Pro Arg Val His Val Lys Asp Glu Gly Glu Phe Thr Cys Arg Ala  
 435 440 445

Gln Asn Pro Leu Gly Ser Gln His Ile Ser Leu Ser Leu Ser Leu Gln  
 450 455 460

Asn Glu Tyr Thr Gly Lys Met Arg Pro Ile Ser Gly Val Thr Leu Gly  
 465 470 475 480

Ala Phe Gly Gly Ala Gly Ala Thr Ala Leu Val Phe Leu Tyr Phe Cys  
 485 490 495

Ile Ile Phe Val Val Val Arg Ser Cys Arg Lys Lys Ser Ala Arg Pro  
 500 505 510

Ala Val Gly Val Gly Asp Thr Gly Met Glu Asp Ala Asn Ala Val Arg  
 515 520 525

Gly Ser Ala Ser Gln Gly Pro Leu Ile Glu Ser Pro Ala Asp Asp Ser  
 530 535 540

Pro Pro His His Ala Pro Pro Ala Leu Ala Thr Pro Ser Pro Glu Glu  
 545 550 555 560

Gly Glu Ile Gln Tyr Ala Ser Leu Ser Phe His Lys Ala Arg Pro Gln  
 565 570 575

Tyr Pro Gln Glu Gln Glu Ala Ile Gly Tyr Glu Tyr Ser Glu Ile Asn  
 580 585 590

Ile Pro Lys  
 595

<210> 49

<211> 143

<212> PRT

<213> Homo sapiens

<400> 49

Met Glu Lys Phe Pro Trp Gln Lys Leu Arg Val Arg Thr Gly Cys Gly  
 1 5 10 15

Gly Pro Gln Val Cys Gly Gly Tyr His Leu Cys Leu Ala Val Leu Met  
 20 25 30

Gly Ile Pro Ser Pro Arg Glu Gly Cys Arg Ser Trp Asp Val Ala Ala  
 35 40 45

Glu Val Trp Thr Gln Arg Pro Arg Ala Ala Val Leu Leu Leu Thr Gly  
 50 55 60

Gly Gly Glu Arg Thr Pro Arg Thr Gln Pro Gly Thr Glu Glu Ala Thr  
 65 70 75 80

Gly Pro Gly Ala Cys Ala Gly Trp Ile Ala Gln Asp Thr Pro Asn Pro  
 85 90 95

Phe Ser Lys Ala Gly Ala Gly Gly Glu Gly Thr Arg Gln Ser  
 100 105 110

Ala Gly Arg Ala Gly Gly Glu Pro Gly Gly Glu Gly Pro Trp  
 115 120 125

Val Arg Val Ser Trp Pro Pro Leu Leu Gln Gly Arg Gln Gly Gly  
 130 135 140

<210> 50

<211> 196

<212> PRT

<213> Homo sapiens

<400> 50  
 Met Leu Ser Leu Glu Phe Leu Ser Trp Ser Val Ser Pro Phe Pro Ser  
 1 5 10 15  
 Pro Arg His Pro Ser Thr Pro His Arg Ser His Arg Ala Ser Pro His  
 20 25 30  
 Pro Asp Arg Pro Pro Lys Asn Lys Gly Glu Val Ile Arg Ala Ser Ala  
 35 40 45  
 Ala Ser Arg Gln Thr Gln Gln Cys Arg Val Gly Val Leu Gly Val Leu  
 50 55 60  
 Asp Asp Pro Gly Pro Glu Leu Glu Leu Gln Glu Ala Ala Val Val Val  
 65 70 75 80  
 Arg Arg Leu Arg His Glu Ala Gly Lys Gly Gln Gly His Gln Arg Leu  
 85 90 95  
 Gln Glu Val Leu Gly Lys Leu His Ile Leu Pro Val Val Gln Pro Arg  
 100 105 110  
 Val Leu Gly His Asp Ala Ile Ala Gly Val Glu Gly Pro Gln Val His  
 115 120 125  
 Val Gln Val Val Ala Phe Ala Val Leu His Ala Glu Lys Val Ala Leu  
 130 135 140  
 Asp Arg Leu Leu Pro Tyr Glu Ala Ala Leu Ile His His Arg Ala Gly  
 145 150 155 160  
 Leu Cys Pro Pro Gln Leu Leu Ala Val Ala His Val Leu Gln Val Asp  
 165 170 175  
 Ala Gln Val His Val Val Val Pro Trp Asp Asp Val Pro Val Ala Gly  
 180 185 190  
 Gly Pro Gln Gln  
 195

<210> 51  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens

<400> 51  
 Met Arg Glu Gly Trp His Trp Gln Glu Glu Ser Thr Arg Thr Arg Met  
 1 5 10 15  
 Gly Ser Asp Leu Gln Ile Tyr Gln Met Val Met Pro Thr Gly Ser Arg  
 20 25 30  
 Gly Tyr Ala Trp Gly His Pro Gly Ser Ser Gln Ser Trp Arg Glu Thr  
 35 40 45  
 Gly Met Ser Arg Arg Pro Ala Gly Pro Ser Thr Ala Pro Asp Pro Lys  
 50 55 60

Lys Val Phe Cys Pro Arg Phe Arg Glu Pro Cys Ala Leu Gly Gln Gly  
 65 70 75 80  
 Gln Ser Phe Gly Asn Ser Ala Gly Ser Gly Ala Arg Leu Ala Arg Phe  
 85 90 95  
 Lys Ser Trp Leu Tyr Arg Phe Gly Ala Arg Trp Ala Trp Gly Gly Val  
 100 105 110  
 Ala Val Ser Leu Cys Leu Ser Cys Phe Gln Asp Ala Gly Pro Leu Ala  
 115 120 125  
 Ala Gly Val Ala Ser Ala Thr Arg Gly Arg Ala Gly Pro Ala Pro Gly  
 130 135 140  
 Gly Pro Leu Trp Leu Pro Gly Asp Ser Thr Pro Arg Ala Cys Val Pro  
 145 150 155 160

<210> 52  
 <211> 226  
 <212> PRT  
 <213> Homo sapiens

<400> 52  
 Met Val Gln Gln Gly Leu Leu Lys Asn Gly Ala His Gln Cys Ala His  
 1 5 10 15  
 Leu Ile Cys Ile Asn Glu Ala His Val Gly Gly His Arg Glu Leu  
 20 25 30  
 Asp Ile Pro Gln His Arg Arg Gly Pro Leu Lys Leu His Leu Gly His  
 35 40 45  
 Arg Glu Leu Glu Ser Gln Val His Tyr His Ile Gln Gly Glu Glu Gly  
 50 55 60  
 Leu Glu Ser Arg Val Gly Gly Cys Gly Gln Asp Leu His Glu Gly Leu  
 65 70 75 80  
 Gln Pro Gln Gly Gly Val Val Cys Val Glu His Gly His Arg Cys Gly  
 85 90 95  
 Thr Gln Pro His Leu Glu His His Arg His Gly Leu Gly Lys Leu Ala  
 100 105 110  
 Gly His Leu Arg Asp Glu Pro Ala Gln Ser Arg Gly Val Gln Gln Val  
 115 120 125  
 Val Ile Arg Pro Gln Leu Pro Cys Asp Val Gln Val Glu Gly Thr Gly  
 130 135 140  
 Leu Leu Gln Gln Gln Glu Arg Arg Val Lys Gln Leu Leu Gly Glu Ala  
 145 150 155 160

His Gly Gly His Gly Ala Leu Gly Thr His Met Pro Trp Gln His Lys  
 165 170 175

Arg Gly Gly Ile Arg Gly Gln Asp Asp Gly Leu Ala Gln Glu Glu  
 180 185 190

Asn Ser Ile Asp Phe Gln Gly Asn Val Val Thr Gly Asp Ser Gly His  
 195 200 205

Thr Asp His Gly Ile Ala Asp Leu Gly Leu Arg Thr His Gly Val Glu  
 210 215 220

Ala Asn  
 225

<210> 53  
 <211> 164  
 <212> PRT  
 <213> Homo sapiens

<400> 53  
 Pro Gly Arg Pro Thr Arg Pro Leu Lys Phe Val Ile Leu His Ala Glu  
 1 5 10 15

Asp Asp Thr Asp Glu Ala Leu Arg Val Gln Asn Leu Leu Gln Asp Asp  
 20 25 30

Phe Gly Ile Lys Pro Gly Ile Ile Phe Ala Glu Met Pro Cys Gly Arg  
 35 40 45

Gln His Leu Gln Asn Leu Asp Asp Ala Val Asn Gly Ser Ala Trp Thr  
 50 55 60

Ile Leu Leu Leu Thr Glu Asn Phe Leu Arg Asp Thr Trp Cys Asn Phe  
 65 70 75 80

Gln Phe Tyr Thr Ser Leu Met Asn Ser Val Asn Arg Gln His Lys Tyr  
 85 90 95

Asn Ser Val Ile Pro Met Arg Pro Leu Asn Asn Pro Leu Pro Arg Glu  
 100 105 110

Arg Thr Pro Phe Ala Leu Gln Thr Ile Asn Ala Leu Glu Glu Ser  
 115 120 125

Arg Gly Phe Pro Thr Gln Val Glu Arg Ile Phe Gln Glu Ser Val Tyr  
 130 135 140

Lys Thr Gln Gln Thr Ile Trp Lys Glu Thr Arg Asn Met Val Gln Arg  
 145 150 155 160

Gln Phe Ile Ala

<210> 54

<211> 314  
 <212> PRT  
 <213> Homo sapiens

<400> 54  
 Arg Val Asp Pro Arg Val Arg Gly Arg Val Gly Phe Glu Ser Leu Lys  
 1 5 10 15  
 Ser Asp Phe Asn Lys Tyr Trp Val Pro Cys Val Trp Phe Thr Asn Leu  
 20 25 30  
 Ala Ala Gln Ala Arg Arg Asp Gly Arg Ile Arg Asp Asp Ile Ala Leu  
 35 40 45  
 Cys Leu Leu Leu Glu Glu Leu Asn Lys Tyr Arg Ala Lys Cys Ser Met  
 50 55 60  
 Leu Phe His Tyr Asp Trp Ile Ser Ile Pro Leu Val Tyr Thr Gln Val  
 65 70 75 80  
 Val Thr Ile Ala Val Tyr Ser Phe Phe Ala Leu Ser Leu Val Gly Arg  
 85 90 95  
 Gln Phe Val Glu Pro Glu Ala Gly Ala Ala Lys Pro Gln Lys Leu Leu  
 100 105 110  
 Lys Pro Gly Gln Glu Pro Ala Pro Ala Leu Gly Asp Pro Asp Met Tyr  
 115 120 125  
 Val Pro Leu Thr Thr Leu Leu Gln Phe Phe Tyr Ala Gly Trp Leu  
 130 135 140  
 Lys Val Ala Glu Gln Ile Ile Asn Pro Phe Gly Glu Asp Asp Asp Asp  
 145 150 155 160  
 Phe Glu Thr Asn Gln Leu Ile Asp Arg Asn Leu Gln Val Ser Leu Leu  
 165 170 175  
 Ser Val Asp Glu Met Tyr Gln Asn Leu Pro Pro Ala Glu Lys Asp Gln  
 180 185 190  
 Tyr Trp Asp Glu Asp Gln Pro Gln Pro Pro Tyr Thr Val Ala Thr Ala  
 195 200 205  
 Ala Glu Ser Leu Arg Pro Ser Phe Leu Gly Ser Thr Phe Asn Leu Arg  
 210 215 220  
 Met Ser Asp Asp Pro Glu Gln Ser Leu Gln Val Glu Ala Ser Pro Gly  
 225 230 235 240  
 Ser Gly Arg Pro Ala Pro Ala Ala Gln Thr Pro Leu Leu Gly Arg Phe  
 245 250 255  
 Leu Gly Val Gly Ala Pro Ser Pro Ala Ile Ser Leu Arg Asn Phe Gly  
 260 265 270  
 Arg Val Arg Gly Thr Pro Arg Pro Pro His Leu Leu Arg Phe Arg Ala  
 275 280 285

Glu Glu Gly Gly Asp Pro Glu Ala Ala Ala Arg Ile Glu Glu Glu Ser  
 290 295 300

Ala Glu Ser Gly Asp Glu Ala Leu Glu Pro  
 305 310

<210> 55  
 <211> 196  
 <212> PRT  
 <213> Homo sapiens

<400> 55  
 Asn Thr Thr His Tyr Arg Glu Ser Trp Tyr Ala Cys Arg Tyr Arg Ser  
 1 5 10 15

Gly Ile Pro Gly Ser Thr His Ala Ser Ala Gly Ser Val Ala Asp Ser  
 20 25 30

Asp Ala Val Val Lys Leu Asp Asp Gly His Leu Asn Asn Ser Leu Ser  
 35 40 45

Ser Pro Val Gln Ala Asp Val Tyr Phe Pro Arg Leu Ile Val Pro Phe  
 50 55 60

Cys Gly His Ile Lys Gly Gly Met Arg Pro Gly Lys Lys Val Leu Val  
 65 70 75 80

Met Gly Ile Val Asp Leu Asn Pro Glu Ser Phe Ala Ile Ser Leu Thr  
 85 90 95

Cys Gly Asp Ser Glu Asp Pro Pro Ala Asp Val Ala Ile Glu Leu Lys  
 100 105 110

Ala Val Phe Thr Asp Arg Gln Leu Leu Arg Asn Ser Cys Ile Ser Gly  
 115 120 125

Glu Arg Gly Glu Glu Gln Ser Ala Ile Pro Tyr Phe Pro Phe Ile Pro  
 130 135 140

Asp Gln Pro Phe Arg Val Glu Ile Leu Cys Glu His Pro Arg Phe Arg  
 145 150 155 160

Val Phe Val Asp Gly His Gln Leu Phe Asp Phe Tyr His Arg Ile Gln  
 165 170 175

Thr Leu Ser Ala Ile Asp Thr Ile Lys Ile Asn Gly Asp Leu Gln Ile  
 180 185 190

Thr Lys Leu Gly  
 195

<210> 56  
 <211> 231  
 <212> PRT  
 <213> Homo sapiens

<400> 56  
 Leu Arg Ala Ala Leu Pro Ala Leu Leu Leu Pro Leu Leu Gly Leu Ala  
 1 5 10 15  
 Ala Ala Ala Val Ala Asp Cys Pro Ser Ser Thr Trp Ile Gln Phe Gln  
 20 25 30  
 Asp Ser Cys Tyr Ile Phe Leu Gln Glu Ala Ile Lys Val Glu Ser Ile  
 35 40 45  
 Glu Asp Val Arg Asn Gln Cys Thr Asp His Gly Ala Asp Met Ile Ser  
 50 55 60  
 Ile His Asn Glu Glu Asn Ala Phe Ile Leu Asp Thr Leu Lys Lys  
 65 70 75 80  
 Gln Trp Lys Gly Pro Asp Asp Ile Leu Leu Gly Met Phe Tyr Asp Thr  
 85 90 95  
 Asp Asp Ala Ser Phe Lys Trp Phe Asp Asn Ser Asn Met Thr Phe Asp  
 100 105 110  
 Lys Trp Thr Asp Gln Asp Asp Glu Asp Leu Val Asp Thr Cys Ala  
 115 120 125  
 Phe Leu His Ile Lys Thr Gly Glu Trp Lys Lys Gly Asn Cys Glu Val  
 130 135 140  
 Ser Ser Val Glu Gly Thr Leu Cys Lys Thr Ala Ile Pro Tyr Lys Arg  
 145 150 155 160  
 Lys Tyr Leu Ser Asp Asn His Ile Leu Ile Ser Ala Leu Val Ile Ala  
 165 170 175  
 Ser Thr Val Ile Leu Thr Val Leu Gly Ala Ile Ile Trp Phe Leu Tyr  
 180 185 190  
 Lys Lys His Ser Asp Ser Arg Phe Thr Thr Val Phe Ser Thr Ala Pro  
 195 200 205  
 Gln Ser Pro Tyr Asn Glu Asp Cys Val Leu Val Val Gly Glu Glu Asn  
 210 215 220  
 Glu Tyr Pro Val Gln Phe Asp  
 225 230

<210> 57  
 <211> 367  
 <212> PRT  
 <213> Homo sapiens

<400> 57  
 Met Ser Ser Asn Gly Ile Pro Glu Cys Tyr Ala Glu Glu Asp Glu Phe  
 1 5 10 15  
 Ser Gly Leu Glu Thr Asp Thr Ala Val Pro Thr Glu Glu Ala Tyr Val

20	25	30
Ile Tyr Asp Glu Asp Tyr Glu Phe Glu Thr Ser Arg Pro Pro Thr Thr		
35	40	45
Thr Glu Pro Ser Thr Thr Ala Thr Thr Pro Arg Val Ile Pro Glu Glu		
50	55	60
Gly Ala Ile Ser Ser Phe Pro Glu Glu Phe Asp Leu Ala Gly Arg		
65	70	75
Lys Arg Phe Val Ala Pro Tyr Val Thr Tyr Leu Asn Lys Asp Pro Ser		
85	90	95
Ala Pro Cys Ser Leu Thr Asp Ala Leu Asp His Phe Gln Val Asp Ser		
100	105	110
Leu Asp Glu Ile Ile Pro Asn Asp Leu Lys Lys Ser Asp Leu Pro Pro		
115	120	125
Gln His Ala Pro Arg Asn Ile Thr Val Val Ala Val Glu Gly Cys His		
130	135	140
Ser Phe Val Ile Val Asp Trp Asp Lys Ala Thr Pro Gly Asp Val Val		
145	150	155
160		
Thr Gly Tyr Leu Val Tyr Ser Ala Ser Tyr Glu Asp Phe Ile Arg Asn		
165	170	175
Lys Trp Ser Thr Gln Ala Ser Ser Val Thr His Leu Pro Ile Glu Asn		
180	185	190
Leu Lys Pro Asn Thr Arg Tyr Tyr Phe Lys Val Gln Ala Gln Asn Pro		
195	200	205
His Gly Tyr Gly Pro Ile Ser Pro Ser Val Ser Phe Val Thr Glu Ser		
210	215	220
Asp Asn Pro Leu Leu Val Val Arg Pro Pro Gly Gly Glu Pro Ile Trp		
225	230	235
240		
Ile Pro Phe Ala Phe Lys His Asp Pro Ser Tyr Thr Asp Cys His Gly		
245	250	255
Arg Gln Tyr Val Lys Arg Thr Trp Tyr Arg Lys Phe Val Gly Val Val		
260	265	270
Leu Cys Asn Ser Leu Arg Tyr Lys Ile Tyr Leu Ser Asp Asn Leu Lys		
275	280	285
Asp Thr Phe Tyr Ser Ile Gly Asp Ser Trp Gly Arg Gly Glu Asp His		
290	295	300
Cys Gln Phe Val Asp Ser His Leu Asp Gly Arg Thr Gly Pro Gln Ser		
305	310	315
320		
Tyr Val Glu Ala Leu Pro Thr Ile Gln Gly Tyr Tyr Arg Gln Tyr Arg		
325	330	335

Gln Glu Pro Val Arg Phe Gly Asn Ile Gly Phe Gly Thr Pro Tyr Tyr  
 340 345 350

Tyr Val Gly Trp Tyr Glu Cys Gly Val Ser Ile Pro Gly Lys Trp  
 355 360 365

<210> 58  
 <211> 565  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (270)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 58  
 Met Thr Gly Leu Val Asp Leu Thr Leu Ser Arg Asn Ala Ile Thr Arg  
 1 5 10 15

Ile Gly Ala Arg Ala Phe Gly Asp Leu Glu Ser Leu Arg Ser Leu His  
 20 25 30

Leu Asp Gly Asn Arg Leu Val Glu Leu Gly Thr Gly Ser Leu Arg Gly  
 35 40 45

Pro Val Asn Leu Gln His Leu Ile Leu Ser Gly Asn Gln Leu Gly Arg  
 50 55 60

Ile Ala Pro Gly Ala Phe Asp Asp Phe Leu Glu Ser Leu Glu Asp Leu  
 65 70 75 80

Asp Leu Ser Tyr Asn Asn Leu Arg Gln Val Pro Trp Ala Gly Ile Gly  
 85 90 95

Ala Met Pro Ala Leu His Thr Leu Asn Leu Asp His Asn Leu Ile Asp  
 100 105 110

Ala Leu Pro Pro Gly Ala Phe Ala Gln Leu Gly Gln Leu Ser Arg Leu  
 115 120 125

Asp Leu Thr Ser Asn Arg Leu Ala Thr Leu Ala Pro Asp Pro Leu Phe  
 130 135 140

Ser Arg Gly Arg Asp Ala Glu Ala Ser Pro Ala Pro Leu Val Leu Ser  
 145 150 155 160

Phe Ser Gly Asn Pro Leu His Cys Asn Cys Glu Leu Leu Trp Leu Arg  
 165 170 175

Arg Leu Ala Arg Pro Asp Asp Leu Glu Thr Cys Ala Ser Pro Pro Gly  
 180 185 190

Leu Ala Gly Arg Tyr Phe Trp Ala Val Pro Glu Gly Glu Phe Ser Cys  
 195 200 205

Glu Pro Pro Leu Ile Ala Arg His Thr Gln Arg Leu Trp Val Leu Glu  
 210 215 220

Gly Gln Arg Ala Thr Leu Arg Cys Arg Ala Leu Gly Asp Pro Ala Pro  
 225 230 235 240

Thr Met His Trp Val Gly Pro Asp Asp Arg Leu Val Gly Asn Ser Ser  
 245 250 255

Arg Ala Arg Ala Phe Pro Asn Gly Thr Leu Glu Ile Gly Xaa Thr Gly  
 260 265 270

Ala Gly Asp Ala Gly Gly Tyr Thr Cys Ile Ala Thr Asn Pro Ala Gly  
 275 280 285

Glu Ala Thr Ala Arg Val Glu Leu Arg Val Leu Ala Leu Pro His Gly  
 290 295 300

Gly Asn Ser Ser Ala Glu Gly Gly Arg Pro Gly Pro Ser Asp Ile Ala  
 305 310 315 320

Ala Ser Ala Arg Thr Ala Ala Glu Gly Glu Gly Thr Leu Glu Ser Glu  
 325 330 335

Pro Ala Val Gln Val Thr Glu Val Thr Ala Thr Ser Gly Leu Val Ser  
 340 345 350

Trp Gly Pro Gly Arg Pro Ala Asp Pro Val Trp Met Phe Gln Ile Gln  
 355 360 365

Tyr Asn Ser Ser Glu Asp Glu Thr Leu Ile Tyr Arg Ile Val Pro Ala  
 370 375 380

Ser Ser His His Phe Leu Leu Lys His Leu Val Pro Gly Ala Asp Tyr  
 385 390 395 400

Asp Leu Cys Leu Leu Ala Leu Ser Pro Ala Ala Gly Pro Ser Asp Leu  
 405 410 415

Thr Ala Thr Arg Leu Leu Gly Cys Ala His Phe Ser Thr Leu Pro Ala  
 420 425 430

Ser Pro Leu Cys His Ala Leu Gln Ala His Val Leu Gly Gly Thr Leu  
 435 440 445

Thr Val Ala Val Gly Gly Val Leu Val Ala Ala Leu Leu Val Phe Thr  
 450 455 460

Val Ala Leu Leu Val Arg Gly Arg Gly Ala Gly Asn Gly Arg Leu Pro  
 465 470 475 480

Leu Lys Leu Ser His Val Gln Ser Gln Thr Asn Gly Gly Pro Ser Pro  
 485 490 495

Thr Pro Lys Ala His Pro Pro Arg Ser Pro Pro Pro Arg Pro Gln Arg  
 500 505 510

Ser Cys Ser Leu Asp Leu Gly Asp Ala Gly Cys Tyr Gly Tyr Ala Arg

515

520

525

Arg Leu Gly Gly Ala Trp Ala Arg Arg Ser His Ser Val His Gly Gly  
 530 535 540

Leu Leu Gly Ala Gly Cys Arg Gly Val Gly Gly Ser Ala Glu Arg Leu  
 545 550 555 560

Glu Glu Ser Val Val  
 565

&lt;210&gt; 59

&lt;211&gt; 139

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 59

Met Glu Lys Ala Lys Glu Arg Met Lys Lys Gln Ala Gln Asn Gly Lys  
 1 5 10 15

Ser His Ile Leu Gln Arg Asn Pro Leu Asn Ser Pro Gly Asn Leu Gln  
 20 25 30

Glu Met Lys Met Thr Lys Thr Ala Lys Lys Arg Lys Thr Lys Ala Ala  
 35 40 45

Leu Arg Val Glu Met Arg Ala Thr Thr Gln Glu Thr Gln Leu Gln Thr  
 50 55 60

Cys Arg Lys Pro Val Lys Gly Pro Asn Tyr His Asn Glu Cys Cys Ile  
 65 70 75 80

Leu Arg Glu Thr Thr Arg Arg Leu Tyr Val Trp Leu Ser Asn Ile Leu  
 85 90 95

Gly Phe Asp Met Asn Gln His Ile Val Leu Val Val Ile Asp Arg Thr  
 100 105 110

Pro Val Cys Met Tyr Ile Ile His Ile Pro Leu Cys Cys Val Ser Gly  
 115 120 125

Gly Lys Asp Ile Leu Ala Phe Phe Lys Ser Tyr  
 130 135

&lt;210&gt; 60

&lt;211&gt; 145

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 60

Met Ala Arg Pro Arg Pro Arg Glu Tyr Lys Ala Gly Asp Leu Val Phe  
 1 5 10 15

Ala Lys Met Lys Gly Tyr Pro His Trp Pro Ala Arg Ile Asp Glu Leu  
 20 25 30

Pro Glu Gly Ala Val Lys Pro Pro Ala Asn Lys Tyr Pro Ile Phe Phe  
 35 40 45

Phe Gly Thr His Glu Thr Ala Phe Leu Gly Pro Lys Asp Leu Phe Pro  
 50 55 60

Tyr Lys Glu Tyr Lys Asp Lys Phe Gly Lys Ser Asn Lys Arg Lys Gly  
 65 70 75 80

Phe Asn Glu Gly Leu Trp Glu Ile Glu Asn Asn Pro Gly Val Lys Phe  
 85 90 95

Thr Gly Tyr Gln Ala Ile Gln Gln Ser Ser Ser Glu Thr Glu Gly  
 100 105 110

Glu Gly Asn Thr Ala Asp Ala Ser Ser Glu Glu Glu Gly Asp Arg  
 115 120 125

Val Glu Glu Asp Gly Lys Lys Lys Lys Lys Asn Leu Val Pro  
 130 135 140

Asn  
 145

<210> 61  
 <211> 104  
 <212> PRT  
 <213> Homo sapiens

<400> 61  
 Met Met Gln Leu Asn Phe Ile Arg Thr Arg Leu Val Gly Thr Gly Val  
 1 5 10 15

Ala Thr Ser Arg Ala Arg Arg Gly Thr Gly Glu Gly Ser Gln Gly Cys  
 20 25 30

His Pro Val Leu Leu Val Ile Val Val Leu Val Ile Gly Thr Gly Thr  
 35 40 45

Val Leu Thr Ala Gln His Leu His Gln Gln Leu Asp Gln Leu Arg Leu  
 50 55 60

Val His Trp Leu Gln Ala Ile Tyr Ala Gly Leu Glu Phe Ser His Cys  
 65 70 75 80

Cys Leu Gly Ile Phe Val Asp Ile Val Leu Ala Gln Gly Pro Leu Ile  
 85 90 95

Glu Leu Leu Trp Gly Pro His Gln  
 100